

In the Claims:

Please cancel claim 4.

Please amend claims 1 and 3 as set forth in the "Listing of Claims" below.

Please add new claims 9 and 10 as set forth below in the "Listing of Claims".

LISTING OF CLAIMS

Claim 1 (Currently Amended): A method for oxidation of a surface of an object to be processed in a single processing container which can contain a plurality of objects to be processed, ~~at least~~ a nitride film and silicon being both exposed on said surface of said object to be processed, said method characterized by performing said oxidation wherein:

active hydroxyl species and active oxygen species are mainly used in a vacuum atmosphere;

a processing pressure is determined to be 133 Pa or below; and

a processing temperature is determined to be 400°C or above.

Claim 2 (Original): A method for oxidation of an object to be processed according to claim 1, characterized by feeding an oxidizing gas and a reducing gas into said processing container respectively by separate gas supply systems in order to produce said active oxygen species and said active hydroxyl species.

Claim 3 (Currently Amended): A method for oxidation of an object to be processed according to claim 1, characterized in that: said oxidizing gas includes one or more ~~gasses~~ gases selected from a the group consisting of O₂, N₂O, NO and NO₂; said reducing gas is H₂ gas; and H₂ concentration inside said processing container is 40% or below.

Claim 4 (Canceled)

Claim 5 (Previously Presented): A method for oxidation of an object to be processed according to claim 3, characterized in that said H₂ concentration is within the range from 5 to 33%.

Claim 6 (Previously Presented): A method for oxidation of an object to be processed according to claim 1, characterized in that said processing temperature is within the range from 800 to 1,000°C.

Claim 7 (Previously Presented): A method for oxidation of an object to be processed according to claim 1, characterized in that, prior to said oxidation processing, said nitride film is formed to have an extra thickness corresponding to a thickness of the surface of said nitride film to be oxidized.

Claim 8 (Previously Presented): A method for oxidation of an object to be processed according to claim 1, characterized in that said nitride film is a silicon nitride film (SiN).

Claim 9 (New): A method for oxidation of an object to be processed according to claim 1, characterized by feeding the oxidizing gas and the reducing gas into said processing container respectively by separate gas feed locations, wherein a distance between a wafer-accommodating region in the processing container and each of said gas feed locations is 100 mm or more.

Claim 10 (New): A method for oxidation of an object to be processes according to claim 1, wherein said oxidation forms SiO₂ on said nitride film of the object.